

Amendments to Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. - 13. (canceled)

14. (new) A computer tomograph system, comprising:

a rotating part for accommodating at least one X-ray tube and a detector arrangement;

a stationary part for rotatably supporting the rotating part, comprising at least one DC-to-AC converter for generating an alternating current at a first frequency;

wherein the stationary part comprises a conductor arrangement mounted to the stationary part by support rods, supplied with alternating current from one or a plurality of the DC-to-AC converters; and

wherein the rotating part comprises at least one inductive coupler for engaging, exclusively in dependence upon position, with a section of an entire length of the conductor arrangement, and for coupling electrical energy out of the conductor arrangement.

15. (new) The computer tomograph system according to claim 14, wherein the conductor arrangement comprises 1, 2, or 3 parallel conductors through which electric currents flow so that the sum of the currents through all conductors is zero at every place of the conductor arrangement.

16. (new) The computer tomograph system according to claim 14, wherein the conductor arrangement comprises a plurality of segments along a circumferential direction.

17. (new) The computer tomograph system according to claim 14, wherein a plurality of couplers are provided, at least one coupler being engaged with the conductor arrangement at any instant of time.
18. (new) The computer tomograph system according to claim 14, wherein at least one coupler comprises magnetically soft material for concentrating magnetic flux.
19. (new) The computer tomograph system according to claim 14, wherein a plurality of DC-to-AC converters are provided, each supplying current to one conductor and/or one segment of the conductor arrangement.
20. (new) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to supply current to one conductor and/or one segment of the conductor arrangement at or close to a respective resonance frequency.
21. (new) The computer tomograph system according to claim 14, wherein at least one series capacity is connected in series with the conductor arrangement or the coupler.
22. (new) The computer tomograph system according to claim 14, wherein at least one parallel capacity is connected in parallel with the conductor arrangement or the coupler.
23. (new) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to detect a condition in which the conductor arrangement, or a segment of the conductor arrangement, is not engaged with at least one coupler, and to be switched off or controlled to a no-load frequency in case of non-engagement.
24. (new) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current of at least one second frequency to supply current to at least one other consumer, and wherein at least one coupler, or a circuitry of a coupler, is adapted to be frequency selective to select the at least one second frequency, and to

pass substantially a tapped-off signal or tapped-off energy having the second frequency to at least one other consumer.

25. (new) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current at a variable pulse-width repetition rate, and wherein a filter unit is provided on the rotating part to select frequency components with whole-number multiples of the first frequency, and to supply current having the selected frequency components to at least one other consumer.

26. (new) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current having a modulated output frequency, a frequency sweep being chosen to be so small that no significant fluctuations of amplitude of an output current occur, and simultaneously the modulation frequency being chosen to be higher than, or equal to, 100 Hz.

27. (new) A computer tomograph system, comprising:

a rotating part for accommodating at least one X-ray tube and a detector arrangement;

a stationary part for rotatably supporting the rotating part, comprising at least one DC-to-AC converter for generating an alternating current at a first frequency;

wherein the rotating part comprises a conductor arrangement; and

wherein the stationary part comprises at least one inductive coupler supplied with alternating current from one or a plurality of the DC-to-AC converters, for engaging, exclusively in dependence upon position, with a section of the entire length of the conductor arrangement, and for coupling electrical energy into the conductor arrangement.

28. (new) The computer tomograph system according to claim 27, wherein the conductor arrangement comprises 1, 2, or 3 parallel conductors through which electric currents flow so that the sum of the currents through all conductors is zero at every place of the conductor arrangement.
29. (new) The computer tomograph system according to claim 27, wherein the conductor arrangement comprises a plurality of segments along a circumferential direction.
30. (new) The computer tomograph system according to claim 27, wherein a plurality of couplers are provided, at least one coupler being engaged with the conductor arrangement at any instant of time.
31. (new) The computer tomograph system according to claim 27, wherein at least one coupler comprises magnetically soft material for concentrating magnetic flux.
32. (new) The computer tomograph system according to claim 27, wherein a plurality of DC-to-AC converters are provided, each supplying current to one conductor and/or one segment of the conductor arrangement.
33. (new) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to supply current to one conductor and/or one segment of the conductor arrangement at or close to a respective resonance frequency.
34. (new) The computer tomograph system according to claim 27, wherein at least one series capacity is connected in series with the conductor arrangement or the coupler.
35. (new) The computer tomograph system according to claim 27, wherein at least one parallel capacity is connected in parallel with the conductor arrangement or the coupler.

36. (new) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to detect a condition in which the conductor arrangement, or a segment of the conductor arrangement, is not engaged with at least one coupler, and to be switched off or controlled to a no-load frequency in case of non-engagement.

37. (new) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current of at least one second frequency to supply current to at least one other consumer, and wherein at least one coupler, or a circuitry of a coupler, is adapted to be frequency selective to select the at least one second frequency, and to pass substantially a tapped-off signal or tapped-off energy having the second frequency to at least one other consumer.

38. (new) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current at a variable pulse-width repetition rate, and wherein a filter unit is provided on the rotating part to select frequency components with whole-number multiples of the first frequency, and to supply current having the selected frequency components to at least one other consumer.

39. (new) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current having a modulated output frequency, a frequency sweep being chosen to be so small that no significant fluctuations of amplitude of an output current occur, and simultaneously the modulation frequency being chosen to be higher than, or equal to, 100 Hz.